

DRAFT

A meeting of the New Hampshire Water Well Board was held on February 8, 2007 at 9:00 AM, in rooms 113 & 114, 29 Hazen Drive, Concord, NH, 03302.

Present were: Bart Cushing, Chairman

Rene Pelletier, Secretary

Board members: Peter Caswell, Jeffrey Tasker, Christopher Covell, Thomas Garside, and David Wunsch

Staff: Rick Schofield, and Yvette Meunier

Chairman Cushing brought the meeting to order at 9:06 AM and introduced the Board and staff members.

**Approval of Minutes**

Upon motion by Mr. Covell and seconded by Mr. Pelletier, the Board unanimously voted to accept the Minutes of the December 14, 2006 meeting.

**Administrative Hearing**

**Comac Pump & Well LLC**

Mr. Schofield reported to the Board that Comac Pump & Well LLC and Mr. Comeau had reached a settlement agreement and the terms of the agreement were completed. He had contacted Mr. Comeau prior to the meeting, and Mr. Comeau was satisfied with the outcome. The hearing was subsequently dismissed and upon motion by Mr. Covell, and seconded by Mr. Pelletier, the Board unanimously voted to close the matter regarding Comac Pump & Well LLC.

**Old Business**

**Well Tags**

Mr. Schofield informed the Board that Mr. Kernan was unable to attend the meeting and gave the Board an update on the work that Mr. Kernan had been doing on the proposed bill. Mr. Schofield reported Mr. Kernan's comments on his discussion with Mr. Garside addressing the feasibility of tagging monitoring wells. Based on the discussion, Mr. Kernan has proposed alternative language which suggests only tagging the deepest monitoring well in the network, or to tag any monitoring wells drilled into bedrock. One well completion report would be submitted to the Board, accompanied with a sketch map of the monitoring well network.

Mr. Garside concurred with Mr. Kernan's summary of their discussion.

Mr. Kernan addressed a suggestion that DES Subsurface Systems Bureau inspectors tag wells when they inspect the on-site waste disposal system. The difficulty with this approach is that wells may not always be installed when the inspections are conducted. Inspectors would also be required to obtain a copy of the well completion report to obtain the identification number, and in some cases the reports may not have been submitted at the time of inspection.

Mr. Kernen also provided information on the current status of obtaining the E911 GIS coverage from the Department of Safety (DOS). Currently DOS is exempt from the Right to Know law and cannot share this information with the Department of Environmental Services (DES) because DES is not exempt from this law. In order for DES to obtain the E911 GIS coverage, the agency would also need to obtain an exemption through legislation.

The Chairman commented that the costs associated with tagging wells will be much higher than estimates provided by DES, and that comments from the industry and members of the Board have not been addressed by the legislative sub-committee.

Mr. Pelletier suggested that a member of the Board attend the hearing and express any concerns of the Board to the legislative committee.

The Chairman recognized Dawn Vosburgh who was in attendance representing the NH Water Well Association. Ms. Vosburgh informed the Board that the Association was opposed to well tagging and at the annual meeting voted to hire an attorney to lobby against the bill.

#### Incomplete Reports

Mr. Schofield reported to the Board that the sent back program was reinstated on January 12, 2007. The first round of sent back well reports included 50 reports on January 12, followed by January 19 with 11 reports, January 26 with 8 reports and February 12, with 28 reports. Mr. Schofield reported that it was too soon to estimate how many reports would be sent back per week, but most are due to incomplete location information.

Mr. Schofield reported to the Board that the enforcement unit had suggested the program send a Notice of Violation letter next year for incomplete well completion reports. Mr. Schofield stated that he would prefer to keep this a cooperative program to assist the contractors to complete their reports. Mr. Schofield asked the Board if they would want to consider sending a notice of violation with incomplete reports. Mr. Garside stated he was satisfied with staff's current approach on sent backs and suggested that allowing 30 days to comply should be decreased to 10 days for compliance. Mr. Covell concurred with Mr. Garside and suggested allowing 14 days for compliance. Mr. Caswell and Mr. Tasker recommended using the friendly letter and working with the industry. Mr. Cushing and Mr. Wunsch concurred and supported the 14 day response time.

Commissioner Burack entered the meeting at 9:45PM.

Chairman Cushing invited Commissioner Burack to speak to the Board. Commissioner Burack thanked the Membership for their hard work, dedication and volunteerism and anticipates working closely with the Water Well Board to study, protect, manage and sustain the state's water resources. Mr. Burack reported that DES has received a Federal Grant to develop a New Hampshire water resources management plan and that the work of the Board will be critical in developing the plan.

Chairman Cushing informed Commissioner Burack about the industries concern regarding well tagging and asked the Commissioner for his consideration on the bill.

Commissioner Burack responded that he would consider all the issues and staff recommendations, and it would be helpful to have the Board's comments so they might be considered at the time the Department is formulating its position on the bill. The Commissioner also recommended that the Board had authority to send a letter to the legislative committees and testify before the committees to express the Board's concerns on the bill.

#### Registration of Employees

Mr. Schofield reported to the Board that he had spoken with Mr. Garside prior to the meeting and they were waiting for input from Laurene Poland on the registration of employees and that the discussion will be postponed.

#### NH Building Commission Subcommittee

Mr. Schofield reported to the Board that during the Building Commission Subcommittee meeting on January 12, 2007 the subcommittee voted to amend the definition of potable water in the national plumbing code to include testing of the DES recommended list of analytes and passing the acute analytes parameters. Roger Skillings addressed the Board and asked what party will be responsible for submitting the water quality samples. Mr. Schofield reported that the subcommittee chose not to address that issue.

Mr. Skillings stated the driller should be responsible for taking the test. Mr. Covell agreed with Mr. Skillings.

Mr. Schofield stated that there was discussion at the meeting that the Water Well Board review its rules in consideration of the committee's discussions regarding water quality testing and should inform the water well industry regarding these changes if they are adopted.

#### Groundwater Commission

Sarah Pillsbury informed the Membership that there were seats available on the Groundwater Commission and recommended that Board members should contact Kathy Goode, the Director of Appointments at the governor's office, if they were interested in serving on the Commission.

Mr. Pelletier suggested that customarily members of an industry, such as the NH Water Well Association, serve on Commissions rather than members of Boards.

Mr. Covell expressed an interest as a public member.

#### Licensing

##### New Applicants

Chairman Cushing reported that there were new applications for the Board to review.

The Board reviewed three new applications received since the last meeting. Several members of the Board had questions regarding the experience submitted on the application of Russell Barton, for a technical driller license. The membership discussed the statutory requirement of having one year of experience drilling wells in the crystalline rocks of the Appalachian Region.

Upon motion by Mr. Wunsch, and seconded by Mr. Covell, the Board voted by majority to invite Russell Barton to the next meeting to discuss his application and experience with the Board before approving his application.

Upon further discussion, Mr. Covell asked the Chairman to reconsider the motion. Chairman Cushing agreed to consider a new motion.

Upon motion by Mr. Covell, amended by Mr. Wunsch, and seconded by Mr. Pelletier, the Board voted to give Mr. Barton the option to submit his qualifications in writing, or appear before the Board at the next meeting to discuss his qualifications, before his application will be approved. The Board noted that Mr. Barton must show he has one year of hands-on experience. Mr. Schofield will be contacting Mr. Barton in writing on the matter.

Upon motion by Mr. Caswell, and seconded by Mr. Garside, the Board unanimously voted to allow Alfred Banks Jr., and Guy Chevalier to take the license exam.

Mr. Mackey addressed the Board and submitted a new license application for Derry Well Company Inc., and explained that the applicant Hugh McKissick and his partner, Robert Machain, were in attendance to answer questions of the Board. Mr. McKissick currently has a rotary drill license and would not be required to take the exam.

Mr. McKissick answered several questions of the Board.

Upon motion by Mr. Pelletier, and seconded by Mr. Covell, the Board voted unanimously to approve Mr. McKissick's application.

The Board also approved the application of Joseph Haynes.

#### Licensees on Probation – Status Report

Mr. Schofield reported that four contractors were currently on probation. Of the four, Hartley Industries Inc. was the only company which had not submitted any well completion reports for 2006. He also informed the Membership that on November 13, 2006 the legal unit sent a second demand for payment letter to Hartley Industries Inc., for the remaining balance (\$5200) of a \$6,200 fine. The fine had been previously suspended in a settlement agreement for violations in 2003, but became payable as a result of Mr. Hartley's default on the agreement, by not filing well completion reports in 2005.

The Board requested that Mr. Schofield contact Hartley Industries Inc., in writing to verify for the Board's record that no wells were drilled in 2006.

#### NH Geological Survey Visit

Electronic Reporting

Mr. Wunsch introduced Rick Chormann representing the New Hampshire Geological Survey (NHGS) to the Board. Mr. Chormann presented a slideshow for the Board on the development of electronic reporting of water well construction data. Electronic reporting is a highly efficient data entry process which saves NHGS time and money, while improving the consistency, accuracy and currency of the well data. NHGS is currently working on an electronic well completion reporting form which will streamline their process even more. Mr. Chormann concluded that the use of GPS technology by drillers is well worth promoting, desktop GIS methods have excellent potential to enable rapid geo-referencing of well locations and that tax map and parcel data are critical. This presentation was followed by a tour of the New Hampshire Geological Survey for a demo on their process of locating wells and a discussion on the problems of location information identified on well completion reports.

RulesGeo-exchange Wells

Mr. Schofield introduced Steve Roy representing the Source Water Protection Section to the Board. Mr. Roy reported to the Board that DES' groundwater discharge program has researched the issues pertaining to the impacts of geothermal technology on groundwater quality and has provided the Board a report on geo-exchange wells, which included some recommendations for amendments of the administrative rules.

The report included a list of allowable heat transfer fluids acceptable by 16 US states for open loop and closed loop geothermal systems. Mr. Roy reported that under 40CFR Part 144 (Underground Injection Control Program (UIC)), USEPA regulates all underground injection fluids and requires that all owners or operators of these injection wells be authorized by permit or registration for all class I-V wells including standing column wells and return flow wells. Mr. Roy noted that under the current Water Well Board rules, licensed contractors are not required to install closed loop systems. Mr. Roy stated that since water well rules are up for re-adoption in 2008, this is an opportune time to adopt rules for geothermal wells and streamline the process of approving these injection wells. DES recommends creating a combined permitting and recordkeeping requirement for these wells across various DES programs with a one time application permit and registration form for industrial, commercial and institutional facilities coordinated through the UIC program.

Mr. Roy reported that DES has made the following recommendations for the Water Well Board rules: 1) Require a licensed contractor to install any boreholes or wells for purposes of transferring heat to or from the subsurface. 2) Place restrictions on the allowable heat transfer fluids to be limited to Potable Water, Potable Water with Ethanol, Propylene Glycol, Methanol, Calcium Magnesium Acetate and Potassium Acetate in closed loop geothermal wells. 3) Require signage at the port of entry to any heat pump systems. 4) Recommending construction standards to be added for closed loop systems, which were outlined in the report.

The Board discussed if a closed loop geothermal well should be located no less than 75 feet from a potable water supply well to reduce the possibility of contamination from a potential leak of

heat transfer fluid or leaching grout in a geothermal system. The Board also discussed if a closed loop geothermal well should be located no less than 100 feet from a known source of contamination, including contamination sites registered on the DES GIS database and on-site septic systems. Mr. Roy also reported that DES will also be working closely with the State Plumbers Licensing Board on the limitations on heat transfer fluids and refrigerants.

#### General Review and Discussion

The Board and staff reviewed the previously amended rules and discussed new amendments to the draft rules.

The Board discussed the definition of “competent bedrock” in We 101.08.

The Board discussed the statutory language of the Appalachian Region in We 302.04 (c).

The Board discussed the “written statement of experience” in We 302.05 (a).

The Board discussed reviewing chapter 600 rules for comment at the next meeting.

Mr. Schofield reported to the Board that in the well citing rules, special methods of construction for wells installed in non conforming locations requires a minimum 40 feet of casing if the depth to bedrock is less than 20 feet. This rule does not cover dug wells or gravel wells. Mr. Caswell suggested a bentonite seal should be required for such wells.

Mr. Schofield also noted that on some non conforming well location forms the special methods of well construction section are not completed.

The Board rejected the idea of offering continuing education credits for attending Board meetings, which had been suggested by a licensee.

The Board discussed the DES Waste Water program rule Env-Wq 704.12 (b) which requires that no sewer be located within the protective well radii established in Env-Ws 300 for any public water supply wells, or within 100 feet of any private water supply well. Mr. Schofield reported that he will discuss the matter with Steve Roberts in the Waste Water program and will suggest that a 50 foot setback to private wells would be adequate.

The Board discussed reviewing yield testing requirements for wells at the next meeting.

The Board discussed the rules requiring a check valve at the pressure tank, and the potential cross connection that would be created if the check valve at the pump fails. Surface water could potentially siphon back into the well through a pinhole in the water line, between the tank and the well, potentially contaminating the water system. A licensed pump installer, has suggested installing a second check valve closer to the pitless adapter in the well. Mr. Caswell suggested installing three check valves. Chairman Cushing noted that manufactures of pumping systems recommend one at the tank and one at the pump.

**New Business**

Monitoring Well Completion Reports

Mr. Schofield suggested to the Board that the well completion form should be revised and updated.

Program Enforcement Strategy

The Board discussed reviewing the program enforcement strategy at the next meeting.

Upon motion by Mr. Tasker and seconded by Mr. Wunsch, the Board unanimously voted to adjourn the meeting.